

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn): A method of producing a helical coil chip comprising the steps of:

forming a plurality of wires juxtaposed with predetermined intervals on an upper surface and a lower surface of a substrate by thin film formation processing means;

cutting said substrate in a direction different from the direction in which said wires extend, into a plurality of cut substrates; and

forming additional wires on said cut substrates to connect said plurality of wires juxtaposed on the upper and lower surfaces of said substrates respectively at the same time for all of said cut substrates by thin film formation processing means.

Claim 2 (Withdrawn): A method of producing a helical coil chip according to claim 1, wherein after said substrate is cut into the plurality of cut substrates, said cut substrates are combined to form a collective substrate in which the cut surfaces of said cut substrates constitute upper and lower surfaces of said collective substrate, and said additional wires are formed on the upper and lower surfaces of said collective substrate.

Claim 3 (Withdrawn): A method of producing a helical coil chip according to claim 1, wherein said substrate is made of a material having low dielectric loss characteristics, and a terminal electrode is formed on either one of the surfaces of said cut substrates on which said wires or said additional wires are formed after said additional wires have been formed.

Claim 4 (Withdrawn): A helical coil chip comprising a helical coil formed by connecting a plurality of wires formed to be juxtaposed on an upper surface and a lower

surface of a substrate with a plurality of additional wires formed on a cut surface obtained by cutting said substrate in a direction different from the direction in which said wires extend.

Claim 5 (Withdrawn): A helical coil chip according to claim 4, wherein said substrate is made of a material having low dielectric loss characteristics, and a terminal electrode is provided on either one of the surfaces of said substrate on which said wires or said additional wires are formed.

Claim 6 (Currently Amended): A method of producing a helical coil chip comprising the steps of:

forming a plurality of wires extending parallel to each other with predetermined intervals on an upper surface and a lower surface of a substrate, wherein said plurality of wires on the upper and lower surfaces of said substrate are arranged to extend in the same direction;

cutting said substrate in a direction different from the direction in which said plurality of wires extend in such a way that said plurality of wires are cut to a predetermined length, into a plurality of cut substrates;

reconstructing said cut substrates as a collective substrate by means of an adhesive and a plurality of supplemental members, wherein the opposed cut surfaces of said cut substrates are arranged to face upward and downward in said collective substrate; and

forming a plurality of additional wires by forming a metal film and processing thus formed metal film by thin film processing means, which have a length equal to the thickness of said substrate plus the thickness of each of said plurality of wires formed on the upper and lower surfaces of said substrate and extend parallel to each other with said predetermined intervals, on the upper and lower surfaces of said collective substrate,

wherein each of said plurality of additional wires connects end portions of each of said plurality of wires formed on the upper and lower surfaces of said substrate that pass through the thickness of said collective substrate.

Claim 7 (Currently Amended): A method of producing a helical coil chip according to claim 6, wherein each of said step of forming said plurality of wires on the upper and lower surfaces of said substrate and said step of forming said plurality of additional wires on the upper and lower surfaces of said collective substrate includes a step of forming a protective film on said wires.

Claim 8 (Original): A method of producing a helical coil chip according to claim 6, wherein said step of forming a plurality of wires on the upper and lower surfaces of said collective substrate includes a step of forming a terminal electrode of said helical coil chip on either one of the upper and lower surfaces of said collective substrate.

Claim 9 (Currently Amended): A method of producing a helical coil chip according to claim 6, wherein said step of reconstructing the cut substrates as a collective substrate by means of an adhesive and a plurality of supplemental members comprises the steps of:

juxtaposing said plurality of supplemental members with regular intervals therebetween, each of said intervals being larger than the thickness of said substrate plus the thickness of said wires formed on the upper and lower surfaces of said substrate by a predetermined amount;

fitting each of said cut substrates to each of the interval spaces in such a way that the cut surfaces of the cut substrates are oriented in a direction perpendicular to the direction in which said supplemental members are juxtaposed;

combining said cut substrates and said plurality of supplemental members by means of said adhesive to form an integral element; and

~~grinding such two faces of said cut substrates and said plurality of supplemental members that have been combined~~ upper and lower surfaces of said integral element, that are perpendicular to the direction in which said supplemental members are juxtaposed.

Claim 10 (Currently Amended): A method of producing a helical coil chip according to claim 6, wherein said step of reconstructing the cut substrates as the collective substrate by means of an adhesive and a plurality of supplemental members comprises the steps of:

orienting the cut surfaces of said cut substrates in a predetermined direction and arranging said cut substrates and said plurality of supplemental members alternately in a direction perpendicular to said predetermined direction;

combining said cut substrates and said plurality of supplemental members by means of said adhesive to form an integral element; and

~~grinding such two faces of said cut substrates and said plurality of supplemental members that have been combined~~ upper and lower surfaces of said integral element, that are oriented in said predetermined direction so that end portions of said wires formed on the upper and lower surfaces of said substrate are exposed.

Claim 11 (Withdrawn): A collective substrate to be used in producing a helical coil chip as a base material of the helical coil, comprising:

core members arranged substantially parallel to each other with substantially regular intervals therebetween with their upper and lower surfaces being exposed at upper and lower surfaces of said collective substrate, said core members extending in a predetermined direction and having low dielectric loss characteristics;

a plurality of wires in close contact with said core members, said plurality of wires passing through said collective substrate in a direction different from the direction in which said core members extends so that end portion of the wires are exposed at the upper and lower surfaces of said collective substrate; and

a base portion that fills a space between said plurality of wires and said core members.

Claim 12 (Withdrawn): A helical coil chip comprising a core member made of a material having low dielectric loss characteristics, a coil formed by metal plating and wound around said core member, and a layer functioning as a seed for metal plating provided between said core member and said coil.

Claim 13 (Withdrawn): A helical coil chip according to claim 12 wherein said coil contains Cu as a main material and said seed contains CrCu or TiCu as a main material.